

## Chapter 4

# Field Artillery Command Post Operations

This chapter provides an overview of the essential role information management plays in the delivery of timely and effective artillery fires. The focus then shifts to FA CPs at corps, division, and FA brigade to include elements within subordinate tactical operations and administration and logistic centers. Where feasible, common duties and characteristics among these three echelons of command have been aggregated with differences and additional specifics highlighted in subsequent sections. Since responsibility for the integration of FA fires into the overall FS system rests with force main, tactical, and rear CPs, the chapter also highlights operational responsibilities of corps and division CP FSCs/FSEs and respective DOCCs.

## SECTION I - FA CP RESPONSIBILITIES, ORGANIZATIONS, AND FUNCTIONS

### ROLE OF EFFECTIVE INFORMATION MANAGEMENT

4-1. A common denominator for high performance units has historically been superior proficiency in managing information. Effective information management practices allow commanders and staffs to see the battlefield in time and space -- a function of getting the right information to the right person(s), CP, or delivery system in the right format at the right time. These are absolutely critical for the delivery of timely and effective FA fires. The resulting enhanced situational awareness allows the FA commander and staff to visualize the battlefield more accurately and to detect, identify, track, and engage targets effectively.

4-2. Although effective and efficient information management may be a fundamental prerequisite for attaining high performance, it is but one of the enablers, not the sole determinant. Other factors such as unit cohesion and teamwork, command presence and leadership, and goal clarity are also critical. Information requirements for commanders and staffs are often distinctly different. Staffs require information in greater volume and detail for planning, successful execution of staff processes, and the application of control. Commanders must blend native abilities and experience to such a degree that they can visualize an operation quickly and accurately without detailed, voluminous sources of information. In either case, information generated by automated and manual systems must have one overriding purpose: enabling commanders to make timely decisions during the turmoil and confusion of battle. FM 101-5, *Staff Organization and Operations* provides an overview of significant information management factors addressing prerequisites for information management during CP operations and the tasks of collecting, processing, disseminating, displaying, protecting, and denying information.

## **FA COMMAND POSTS**

### **GENERAL**

4-3. CPs assist commanders in influencing actions on the battlefield while monitoring and maintaining control over unit operations. For successful mission accomplishment, CPs must be efficient and flexible in gathering, collating, analyzing, displaying, and disseminating information. All information should flow through the CP and the information manager. Since CPs are also priority enemy targets, they should be as small and mobile as possible to allow for rapid displacement.

4-4. Specific FA C2 organizations are normally established by unit SOP and reflect the commander's information requirements that best support his leadership style. Commanders should organize and train a battle staff, determine the succession of command, and assign responsibilities. By holding subordinates responsible for their actions and by fostering a climate of mutual trust, cooperation, and teamwork, they can greatly increase their command's effectiveness. Successful battlefield information management is also greatly improved through rigorous training and refinement of the command's C2 system. As a rule, effective and efficient CP operations, supervised by a proficient information manager, are critical for the conduct of productive and successful combat operations.

4-5. The responsibilities of the principal members of the FA C2 organization are outlined in the following paragraphs and sections. Commanders may modify these responsibilities based on the situation and individual capabilities and inclinations. Overall, FA CP functions are designed to monitor events and assist commanders and subordinate units in mission planning, preparation, and execution. Critical functions are to:

- Maintain contact and coordination with higher, adjacent, and subordinate units.
- Adjust current FA support plans and plan future operations.
- Receive, analyze, and disseminate tactical information (vertically and horizontally).
- Maintain situation awareness graphics and reports.
- Request and synchronize combat, CS, and CSS for the battle.
- Coordinate the delivery of fires.

## **ROLE OF FA COMMANDERS AND STAFF**

### **FA COMMANDERS AND COMMAND GROUP**

4-6. As FSCORDs, corps arty and div arty commanders are responsible for planning, integrating, coordinating, synchronizing, and implementing FS for current and future deep, close, and rear operations. Although normally spending much of their time in the company of force commanders guiding FS operations, they retain full command responsibility for FA operations.

4-7. The commanders' role in FA CP information management processes cannot be overstated. They set the pace and normally through the chief of staff/executive officer (CofS/XO) provide subordinate staffs and units planning

guidance in the form of missions, taskings, and a clear statement of their priorities and commander's critical information requirements (CCIR). Unit performance is directly related to their ability to focus the efforts of subordinates through effective communication of information. Through personal initiative, force of personality, experience, and drive, commanders can often overcome shortfalls in CP information management.

4-8. The command group consists of the commander and those selected to accompany him away from the CP. The composition, nature, and tasks of the command group are determined by each commander for optimum flexibility in executing functions as FSCoord and FA commander. The command group typically maintains continuous situational awareness of the enemy and friendly situation through physical observation and from reports by subordinate commanders and higher and adjacent units. Both the force FCEs/FSEs and FA CPs must keep commanders updated on new FS/FA-relevant CCIR information and provide an analysis of events with accompanying recommendations. Drawing on the operations and other staff estimates, the commander prepares and updates the FA commander's estimate as the situation evolves. He ensures all information pertaining to mission planning, preparation, and execution is disseminated expeditiously.

## **THE FA STAFF**

4-9. The FA staff is composed of personal, coordinating, and special staffs. They assist commanders in exercising their authority and making decisions.

4-10. A well-trained coordinating staff greatly reduces demands placed on the commander by developing options and recommendations as needed and ensuring commanders have access to critical, timely information to plan, prepare, and execute. Staff officers must understand the capabilities and limitations of the command's organic and supporting elements, must share information vertically within staff channels and horizontally among other staff elements, and must understand what each has to offer.

4-11. Special staff officers such as the signal officer assist commanders in their areas of expertise generally under the direct supervision of a member of the coordinating staff.

4-12. To control the flow of information within the FA CP, the commander should explicitly designate an information manager, usually the CofS/XO or FA G3/S3. As information manager, he is the commander's principal assistant responsible for internal and external staff coordination. During the commander's absence, he represents the commander and directs action in accordance with established command policy and guidance. During the battle, the information manager is normally in the CP where he monitors the battle, reports to higher headquarters, keeps abreast of the situation, integrates CS and CSS into the overall plan, and plans for future operations. As information manager, he outlines and monitors the performance of the staff in processing information, the CCIR, and liaison activities.

## CP ORGANIZATIONS

4-13. Corps arty, div arty, and FA brigade CPs are the C2 facilities from which the respective commander, assisted by his staff, directs and sustains FA operations. They:

- Provide the required personnel, physical setting, and communications and automation systems to assist FA commanders and principal staff officers see the battlefield, plan, and direct operations.
- Integrate and synchronize FA internal and external combat, CS, and CSS operations.
- Establish priorities, allocate resources, and perform functions as alternate CP when required.

FA CPs normally consist of two major components: the TOC and ALOC. A battery HQ provides life support, communications, and security (Appendix E) to these elements. Specific CP configurations in support of 24-hour operations should be established by unit SOP influenced by METT-TC and unit modified table of organization and equipment (MTOE).

## CP LOCATIONS AND OPERATIONS

4-14. CP positioning is influenced by a number of variables such as the commander's personal inclinations, the threat, communications requirements, experience and availability of personnel, and other METT-TC considerations. Among the primary considerations are communications, accessibility, and survivability. The objective is to select a location suitable for establishing and maintaining C2 over subordinate and supported FA units and facilitating coordination and communication interfaces with higher and adjacent HQ. Coordination among the FA TOC, ALOC, command group, and force CPs must be continuous to ensure all elements are integrated. To meet this goal, corps arty and div arty CPs are normally located within two to five kilometers of corps/division main CPs. Alternatively, they may be collocated within the maneuver command's main CP complex. Displacements should be planned to ensure the CP is stationary during critical phases of the battle. Displacing rapidly and providing a reduced electronic signature also enhances TOC security. TOC personnel should be organized to provide both security and continuous operations on a 24-hour-a-day basis. Sleep plans must be enforced to preserve the ability of CP personnel to perform continuous operations.

4-15. To maintain control over subordinate elements in immature theaters, on extended battlefields, or with insufficient long-range communications, corps arty CPs may be required to echelon themselves. Such action places increased burdens on organic C3 capabilities and normally requires augmentation from the corps signal brigade (e.g., tactical satellites [TACSAT] or additional MSE small extension node [SEN] teams).

4-16. To execute functions as an alternate CP, the following should be in place:

- Status of all reports, orders, and graphics that the TOC develops, sends, receives, or has in current use.
- Personnel trained in the functions required to meet minimum standards of the TOC.

- Ability to communicate with the command group, subordinate units, and the force FSC/FSE.

## **FUNCTIONS AND RESPONSIBILITIES OF KEY PERSONNEL**

### **FA COMMANDER**

4-17. The FA commander provides overall supervision over the FA decision-making process while simultaneously executing responsibilities as FSCOORD on the force main CP staff. Through his CofS/XO and staff, he ensures FA planning activities are effectively synchronized and integrated horizontally within the FA CP and with adjacent elements and vertically with higher, subordinate, supported, and supporting elements.

4-18. He monitors mission preparations to include rehearsals and ensures FA elements are task organized and deployed in support of decisive, shaping and sustaining operations. He provides command presence at critical times and places, retaining his freedom to move, communicate, and survive on the battlefield. Supervising the transition from planning to execution, he:

- Monitors implementation of FA survivability measures. If required, requests additional force protection assets (e.g., ADA, maneuver elements, engineers).
- Adjusts his CCIR as the situation demands.
- Directs changes to the FA support plan based on his “running” estimate and changes in the force FS plan/OPLAN/OPORD.

4-19. During mission execution, the FA commander tracks the flow of battle and directs the FA decision-making process under constrained conditions. He:

- Confirms adherence to the force commander’s attack guidance, FSCM, clearance of fire procedures, and ROE.
- Determines ability of subordinates to execute the FA support plan.
- Monitors BDA results of FA fires in support of the decisive, shaping, and sustaining battles.
- Confirms adherence to the five fundamentals for employing FA in combat.
- Projects the outcome of the current battle to determine the need for further adjustment to FA support.
- Assesses combat readiness of subordinate units after mission completion and initiates remedial actions.

### **CHIEF OF STAFF/EXECUTIVE OFFICER/S-3**

4-20. The CofS/XO/S3 coordinates FA CP staff efforts based on a clear understanding of the commander’s intent and guidance. Policies and guidance established in the TSOP are practiced during TOC battle drills and strictly adhered to during execution under his overall supervision. He functions as the commander’s principal assistant responsible for internal and external staff coordination during mission planning, preparation, and execution. His primary functions include the following:

### Control of the FA CP Information Flow

4-21. The CofS/XO/S3 ensures that information is received, analyzed, processed, and disseminated quickly and efficiently among all members of the FA CP. He:

- Disseminates the FA commander's guidance and directions expeditiously to all staff members and subordinate elements. Ensures all staff officers/NCOs clearly understand:
  - The FA and higher commanders' intent and CCIR.
  - The concept of operations.
  - Status of battle preparations and the enemy and friendly situation.
- Ensures staff members aggressively establish and maintain a constant dialogue with higher, subordinate, supporting, supported, and adjacent elements.
- Ensures staff estimates are updated when new information becomes available or when the tactical situation changes significantly.
- Ensures timely submission of reports and other supporting information to higher HQ.
- Ensures decisions are made in a timely manner and communicated through clear, concise, and rapidly disseminated orders.
- Assists the commander in his battlefield visualization through battle tracking and:
  - Prompt and accurate submission of CCIR responses and any actual/perceived changes in enemy intentions and/or courses of action (COAs).
  - Advising the commander of critical deviations from the facts and assumptions in the FA support plan.
- Supervises liaison operations.
- Ensures staff integration and synchronization during mission planning, preparation, and execution.
- Ensures the FA CP supports effective 24-hour operations. Includes provisions for shift changes, CP displacements, sleeping, eating, and operations under NBC conditions.
- Manages time available for planning, preparation, and execution of key events.
- Provides the commander periodic updates on the status of the current battle and planning efforts.
- Participates in formal and informal briefings during the planning process to include mission analysis, war game, and COA decision briefs.
- Monitors preparation and dissemination of the FA support plan to include full integration of combat, CS, and CSS provisions.
- Ensures continuous synchronization of the FA support plan during mission preparation and execution.
- Determines continued validity of facts, assumptions, CCIR, and staff estimates underpinning the FA support plan.

- Monitors modifications to the FA support plan to account for deviation from anticipated events.
- Ensures changes to published plans are approved and disseminated expeditiously to subordinate and supporting units through FRAGO/warning orders (WARNOs) (orally, in written format, or by overlay).
- Assesses combat readiness of subordinate units after mission completion.

### **G3/S3 FUNCTIONS AND RESPONSIBILITIES**

4-22. Corps arty, div arty, and FA brigade operations officers are the FA commander's primary assistants for preparing FA support plans and orders, exercising control over subordinate FA formations, and delivering timely and effective FA fires. FA G3s/S3s are normally in charge of FA TOC operations while deputy fire support coordinators (DFSCOORDs) provide detailed supervision over FSC/FSE operations in maneuver force CPs. In addition, G3s/S3s exercise coordinating staff supervision over a number of closely related functions to include communications, survey, meteorology, and NBC operations. Through the signal officer, they manage electronic, wire, and messenger systems. Specifically, they:

- Plan, coordinate, and supervise execution of force projection operations.
- Develop and maintain the FA operations estimate and provide findings and conclusions to the FA CP staff, FA command group, and force FSC/FSE.
- Maintain effective control over TOC operations during mission planning, preparation, and execution, ensuring effective staff coordination among TOC and ALOC members, goal clarity, and teamwork.
- Ensure the commander has ready access to critical information at all times.
- Advise FSCOORDs/FSCs/FSEs on FA organization for combat to include TA assets, positioning of FA units, allocation of ammunition, priorities of fires, target selection standards, and commander's attack guidance/criteria.
- Develop the FA support plan in parallel with the force main CP, complying with force HQ instructions and the FA commander's/CofS's/XO's guidance.
- Monitor the operations of the supported force, subordinate elements, and units to the flanks with emphasis on friendly force and enemy FA dispositions and capabilities. Expeditiously inform other staff sections of changes in unit status or missions.
- Assess and monitor the status of current and projected FA capabilities. This includes the adequacy of current FA support and potential future requirements, such as ammunition and communications requirements, combat loss replacements, etc. Advise the FA commanders/FSCOORDs/FSCs/FSEs accordingly.
- Issue FRAGOs/WARNOs and review subordinate unit plans and orders.
- Supervise modifications of the FA support plan.
- Plan and coordinate moves of GS, GSR, and other units as appropriate in support of current operations.
- Perform alternate CP functions to enable the supported FA or maneuver unit to sustain operations until surviving elements can be reconstituted to reestablish critical C2 functions.

- Provide survey support through collocated survey planning and coordination elements (SPCEs) to facilitate survey planning, coordination, and execution.
- Conduct FA tactical and digital rehearsals.
- Coordinate and control the fires of organic, attached, and reinforcing FA units.

## **G2/S2 FUNCTIONS AND RESPONSIBILITIES**

4-23. FA intelligence officers are responsible for collecting, analyzing, and disseminating FA relevant information about the enemy and the terrain and providing the commander and CP staff a coherent, timely, and understandable picture of the battlefield. This picture should clearly portray enemy actions and intentions to facilitate the FA decision-making process and an analysis of available options. During the planning, preparation, and execution phases, they develop and update the FA-focused IPB and intelligence estimate and prepare and monitor reconnaissance and surveillance plans in support of FA operations in conjunction with the G3/S3. FA G2s/S2s rely heavily, though not entirely, on ACE intelligence products and supported maneuver unit G2s/S2s. Their primary focus is on the enemy's FS system, and other HPTs, friendly FA survivability and mobility issues, and the dissemination of relevant information to other staff elements and subordinate commands. In addition, FA G2s/S2s control FA TA assets organic to, attached to, or reinforcing the corps arty, div artys, or FA brigades.

4-24. Although targeting is primarily a FS function for corps and division main CPs, FA G2s/S2s play a limited but important role in the targeting process. They conduct the FA IPB in parallel with the supported maneuver unit and develop FA HPTs throughout the width and depth of the battlefield for attack by corps arty, div arty, and FA brigade assets. They focus on targets with the greatest impact on planned operations and assess the effects of enemy, terrain, and weather on subordinate artillery units. The process is addressed in detail in FM 6-20-10. Specific highlights in support of the overall FA decision-making process are also noted in Chapter 6.

## **G4/S4 FUNCTIONS AND RESPONSIBILITIES**

4-25. G4s/S4s within corps artys, div artys, and FA brigades are primarily planners. They are responsible for establishing and maintaining an awareness of the command's logistic capabilities and limitations through logistic preparation of the battlefield (LPB) and development of the logistic estimate. Further, they coordinate FA logistic requirements (arming, fueling, fixing, moving, and sustaining soldiers and their systems) and assist subordinate FA units in resolving problems. They are also responsible for the organization, security, and employment of the ALOC (when established). In close coordination with G3s/S3s, they ensure that selected COAs are logistically sustainable and assist in the preparation of the FA support plan and administration- logistic (admin-log) tab. If not, they advise TOC planners accordingly. G4s/S4s interactions with G2s/S2s provide them with the required intelligence to forecast losses and subsequent resupply needs based upon the concept of operations. They monitor any friendly force information requirements (FFIR) and essential elements of friendly information (EEFI) concerning their areas of

responsibility and immediately update the commander and TOC when new information is received. They monitor and evaluate CSS reports submitted by major subordinate commands and attached units to include command regulated pacing items such as ATACMS and coordinate logistic support operations for subordinate FA units with corps or division G4s and appropriate corps support command (COSCOM) and/or division support command (DISCOM) elements. Special attention is given to augmenting divisional and FA brigade CSS capabilities with corps logistic assets to meet the requirements of corps arty units attached to divisions or operating out-of-sector. They continually assess the situation, anticipate units' needs, and prepare to push support forward. Anticipating requirements is the key to successful CSS.

### **G1/S1 FUNCTIONS AND RESPONSIBILITIES**

4-26. G1s/S1s have staff responsibility for personnel services, general administration, and public affairs with specific details reflected in unit TSOP. They share responsibility with the G4s/S4s for ALOC operations. They develop and maintain the personnel estimate and assist in the preparation of the FA support plan and admin-log tab. In the process, they assess the personnel supportability of friendly COAs and ensure that personnel operations are fully integrated into the overall FA support plan. They must stay aware of any FFIR and EEFI concerning their areas of responsibility and immediately update the commander and TOC when critical new information is received. Their focus is on:

- Strength accountability.
- Casualty reporting.
- Replacement operations.
- Administrative services.
- Personnel actions.
- Coordinating legal personnel services.
- Postal services.
- Finance services.
- Enemy prisoner of war (EPW) operations.
- Combat health support.

### **TACTICAL OPERATIONS CENTER FUNCTIONS AND RESPONSIBILITIES**

#### **GENERAL**

4-27. TOCs are the core C2 element within FA CPs, requiring assured communications with higher, subordinate, and adjacent elements for effective operations. Supervised by the G3/S3, they integrate FA operations, targeting, and attack elements and synchronize the execution of FA missions. They include the command group (when not forward) and three major functional subdivisions. In corps artys, these are the operations and intelligence, fire control, and plans cells. In div artys and FA brigades, they are the operations, fire control, and targeting elements. TOCs must aggressively seek information about the current tactical situation (friendly unit locations, obstacles, and

cleared lanes, bypassed units, etc.), while disseminating this information to all subordinate and supporting units in a timely manner. Specific duties of each cell/element for each echelon of command are noted in Sections II-IV below.

## **LIAISON OPERATIONS**

4-28. Liaison officers (LNOs) facilitate the exchange of information. They are tasked with general coordination instructions in the parent unit's SOP and with specific coordination instructions each time they are dispatched. Their role as their command's representative requires LNOs to know all unit plans and dispositions. They ensure that critical information is passed between their parent headquarters and the headquarters to which they are dispatched.

4-29. FA is primarily concerned with higher-to-lower and supporting-to-supported liaison relationships. Many of the other principles for establishing liaison such as rear-to-front and left-to-right do not ordinarily apply. In addition, maneuver force FSEs rather than dedicated liaison teams often meet FA liaison requirements in support of maneuver units. Most other liaison requirements involve liaison with other artillery units. The number and type of these requirements varies depending on the echelon of command and the tactical situation. Requirement details can be found in Appendix F.

## **SIGNAL OFFICER/COMMUNICATIONS PLATOON**

4-30. In addition to leading the communications platoon, signal officers exercise technical supervision over the installation and use of communications systems and the activities of communications personnel. They advise the commander and staff on all signal matters and conduct specific duties as directed by the G3/S3. To support TOC operations, they provide communications from higher-to-lower, supporting-to-supported, reinforcing-to-reinforced, and left-to-right (facing the FLOT). In addition, they:

- Advise commanders on all matters pertaining to communications to include reconnoitering possible CP locations, electronic counter-countermeasures (ECCM), EW, and the use of signal activities for deception.
- Plan, direct, and supervise the installation, operation, and maintenance of command communications systems, networks, and facilities, and their efficient operation. They also recommend retransmission equipment employment, establishment of messenger services and schedules, and monitor communications security.
- Coordinate the activities of supporting, supported, or adjacent signal elements in support of command signal operations.
- Prepare the communications and electronics (C-E) tab to the FA support plan. They provide input for the preparation and distribution of SOI and cryptographic instructions.
- Request and manage assigned frequencies to reduce electromagnetic radiation interference.
- Monitor the assignment of signal personnel and equipment in coordination with respective subordinate FA units.
- Coordinate C-E training in support of command activities.

- Ensure timely availability of organic and supporting communications assets to establish and check systems and circuits prior to and after displacements.
- Restore disrupted communications.
- Coordinate with the next higher HQ on problems that cannot be resolved locally and that would limit the unit's mission capability.
- Gain access to and coordinate civilian telephone assets.
- Assist the HHB commander position and secure MSE SENs, and provide logistic support (less electronic maintenance).

## **ADMINISTRATION AND LOGISTIC OPERATIONS CENTER FUNCTIONS AND RESPONSIBILITIES**

### **GENERAL**

4-31. Since corps arty, div arty, and FA brigade HQ have no organic CSS assets, CSS staff officers do not directly control support activities. Their primary role is to assist in planning, coordinating, monitoring, reporting, and expediting CSS operations in support of subordinate FA units and to maintain an accurate status of personnel, equipment, and logistics within their command. For example, while divisional forward support battalions (FSBs) execute resupply operations, div arty CSS staffs should monitor all logistic activities for subordinate elements and forecast and coordinate CSS requirements for artillery units in GS of the division. They advise the TOC on operational issues affected by personnel, equipment, and logistics. As the nerve center for CSS operations and subject to METT-TC conditions, the ALOC may be collocated with the FA TOC or position itself within responsive supporting distance to subordinate command elements and supporting agencies. Like the TOC, it must be positioned where it has communications, accessibility, and survivability. Depending on echelon, it may be collocated with COSCOM or DISCOM elements. The G4/S4 is responsible for ALOC operations, movement, and security with the assistance of the G1/S1.

### **ALOC CSS OPERATIONS**

4-32. The CSS staff must ensure that support is available at times and places required and that CSS operations are fully integrated into unit FA support plans. CSS staff members must act rather than react to support requirements. Personal involvement, awareness of the tactical situation, and on-scene appraisals are critical to mission accomplishment. Problems must be aggressively resolved in coordination with individual reporting FA battalions and brigades and supporting CSS organizations. To streamline CSS operations, each FA echelon should have detailed SOP prescribing times and formats for submitting required CSS-related reports to parent organizations. These reports are critical in providing the force artillery staff and ultimately commanders an accurate overview of the CSS status of their units.

4-33. Cross talk between the TOC and the ALOC is essential to establish and maintain full combat potential. When not collocated with the TOC, the ALOC should send a representative to the TOC at least once daily to ensure that all overlays, changes to plans, and current/projected changes in equipment and personnel status are updated. Any change in the main effort should be reported

to the ALOC by the TOC. Similarly, any major changes in the ability of the CSS system to support an operation must be immediately reported to the TOC.

### **SPECIAL STAFF WITH CSS RESPONSIBILITIES**

4-34. Although overall staff responsibility for CSS activities rests with G1s/S1s and G4s/S4s, special staff officers assist them in selected CSS areas. These special staff officers and their CSS duties are:

- Surgeon/physicians assistant (when authorized) - coordinates and monitors Class VIII (medical supplies) and combat health support.
- Signal officer - coordinates and monitors signal maintenance.
- NBC officer or noncommissioned officer (NCO) - coordinates decontamination support and forecasts NBC-related supply requirements.
- Chaplain - monitors Class VI (personal demand items), morale support, and personnel actions.
- Staff judge advocate – provides operational law advice, and either provides or coordinates legal support in military justice, international law, administrative law, civil law (including contract law, fiscal law, and environmental law), claims, and legal assistance. In addition, the US Army Trial Judiciary and US Army Trial Defense Service, two independent legal organizations, provide military judge and trial defense services, respectively.

## **SECTION II - CORPS ARTY CP OPERATIONS**

### **GENERAL**

4-35. Corps arty CPs are primarily concerned with operational control of subordinate elements during current operations and the planning of future FA operations. CPs are normally located in the vicinity of the corps main CP and rear division boundaries. Specific responsibilities for TOC and ALOC operations are noted below.

### **TACTICAL OPERATIONS CENTERS**

4-36. Corps arty TOCs assist corps arty commanders in the control of FA cannon, rocket and missile delivery systems, and other FA assets retained under corps arty control and not assigned or organic to maneuver units. TOC personnel plan FA fires, monitor ammunition status, and coordinate the positioning and movement of FA units. They develop corps FA support plans and orders and disseminate them to subordinate FA units as part of the force commander's FS plan/OPLAN/OPORD. They receive requests from lower echelons for additional FA fires and process them for engagement. TOC cells executing functions in support of the corps mission include:

### **OPERATIONS AND INTELLIGENCE CELL**

4-37. This cell is concerned mainly with coordinating FA fires in support of current operations. Specific duties are to:

- Develop targets and potential targets from available intelligence.

- Interface with the corps G2 and FAIO to integrate FA targeting requirements into the overall corps collection plan.
- Determine FA targeting information required by the TOC and pass requirements to the corps G2 and FAIO.
- Supervise CTAD operations.
- Coordinate through FSEs the positioning of GSR and GS FA units.
- Maintain the current status and capabilities of all organic, attached, and reinforcing FA units and recommend their organization for combat.
- Work with the G2 to develop and perform target value analysis (TVA).
- Assist in developing target selection standards (TSS), HPTL, and attack guidance matrix (AGM) products.
- Disseminate FA support plans and prepare and modify orders and reports, as required.
- Maintain current information on the tactical situation and battle plan of supported unit(s) to include FS and airspace coordination measures.
- Receive and disseminate ROE, FSCMs, maneuver graphics, and nuclear and chemical strike warning messages.
- Coordinate chemical decontamination and other chemical defense measures.
- Provide the TOC fire control cell (FCC) FA data on planned, current, pending, or changing missions. Inform other staff sections to include the ALOC of changes in the status of supported units requiring changes in FA support.
- Coordinate AO survey requirements with the SPCE.
- Coordinate met requirements and ensure computer, ballistic, and TA met data are disseminated to all organic, attached, and reinforcing FA units.
- Plan and control tactical movements, coordinate routes, and expedite ammunition supply operations.
- Coordinate all corps arty intelligence activities and disseminate information in accordance with unit SOP.
- Assemble and disseminate EEFI, priority intelligence requirements (PIR), and FFIR.
- Integrate IPB products into current and future plans and make modifications as required.
- Maintain classified HQ files.
- Act as force artillery command net control station (NCS).

#### **FIRE CONTROL CELL**

4-38. This element is tasked with providing timely and effective tactical fire control in support of current operations. Duties are to:

- Analyze targets produced by target production sections or passed by FSCs/FSEs for attack by FA systems. Ensure consideration of commander's attack criteria, method of fire, and types of munitions needed.

- Schedule planned FA fires.
- Disseminate target lists and schedules.
- Clear fires.
- Initiate fire requests for additional FA support or support by non-FA FS means.
- Assist the operations and intelligence element in scheduling fires and maintaining target lists.
- Maintain the fire control map.
- Act as NCS for force artillery fire nets.

## **PLANS CELL**

4-39. Functions for this element are to:

- Develop the FA support plan.
- Develop contingency plans in support of future operations and coordinate with higher, adjacent, and subordinate units.
- Develop logistic requirements with the G4/S4.
- Develop and wargame COAs and various contingencies in support of FA operations.
- Maintain the planning map.

## **SURVEY PLANNING AND COORDINATION ELEMENT**

4-40. The mission of the corps arty SPCE includes the following functions (for additional details see FM 6-2, *Tactics, Techniques, and Procedures for Field Artillery Survey*):

- Coordinate survey requirements of artillery and non-artillery units and extend survey control across the corps from higher-to-lower echelons. The goal is to establish survey control before occupation by firing or TA elements.
- Ensure that each weapon and target-locating system within corps and subordinate division boundaries is on the same survey control. A topographic company that is normally attached or OPCON assists the SPCE to each corps. This topographic company maintains an element at the corps TOC for rapid response and special-purpose support.
- Develop the survey plan and recommend survey priorities.
- Maintain maps and overlays to show completed, in-progress, and planned surveys.
- Record all survey control points, benchmarks, and adjacent corps tie-in points established by topographic engineers, and div arty/corps TAB/CTAD survey sections.
- Disseminate survey data over appropriate communication means and published triangulation (trig) lists.
- Coordinate survey requirements with the theater topographic engineer battalion for extending or establishing survey control for the corps.

## **LIAISON SECTIONS**

4-41. Corps arty liaison requirements are substantial. Corps arty CPs should establish liaison with div artys and subordinate FA elements such as FA brigades if corps artys retain direct control over their fires (higher-to-lower). This is particularly critical if allied artillery units are under corps control. Physical liaison is not an absolute requirement if other communications are adequate or if supported and supporting CPs are collocated. However, the dispatch of liaison teams is preferred if distances between CPs prevent routine face-to-face contact between operations officers.

4-42. Corps artys are required to provide an FSE for corps rear CPs. In the absence of TOE authorizations, corps arty commanders generally use a liaison team to meet this mission requirement. In addition, the corps must provide liaison to joint or allied force battlefield coordination detachments (BCDs).

## **CORPS ARTY ADMINISTRATION AND LOGISTIC CENTER**

4-43. Corps arty ALOCs are normally under the direct supervision of the G4 with the G1 serving as his deputy. If not collocated with the TOC, they are frequently located near or within the corps rear CP to facilitate coordination. If not collocated, an ALOC liaison team may also be dispatched to the corps arty TOC to facilitate planning and coordination with G3/G2 elements.

### **G4 SECTION**

4-44. This section coordinates and directs the execution of corps arty logistic activities with responsibility to:

- Coordinate and prioritize issue of all classes of supply, maintenance assistance, and recovery support for subordinate elements in accordance with priorities established by the G3.
- Coordinate with corps materiel management centers (MMCs) on logistic requirements in support of FA organizations for combat, positioning, and unit movements. This may require augmenting division CSS capabilities with corps logistic assets to provide effective support to corps FA brigades and battalions attached to divisions, particularly when these units are equipped with weapons and equipment not organic to the supported division.
- Write the admin-log tab to the corps FA support plan with input from the G1.
- Prepare and submit required logistic reports to the supporting COSCOM in accordance with applicable SOP.

### **G1 SECTION**

4-45. The G1 section provides the corps arty commander advice and recommendations on all matters pertaining to personnel administration and management and assists the G4 in writing the admin-log tab to the FA support plan. In addition to the duties listed in Section I above, the G1 will administer US and non-US civilian employment programs using potential labor sources in the combat area.

## **SECTION III - DIV ARTY CP OPERATIONS**

### **TACTICAL OPERATIONS CENTER**

4-46. Under the supervision of the div arty S3, the TOC plans, directs, coordinates, and controls the fires of all organic, attached, and reinforcing FA units supporting the division. Composed of operations, fire control, and targeting elements, the TOC develops FA support plans and ensures that available firepower adequately supports the division battle plan. The div arty S2 is charged with performing a FA-focused IPB, providing target intelligence, and assisting with TVA. Intelligence will be extracted from intelligence estimates and reports and disseminated to subordinate and supporting organizations.

### **OPERATIONS ELEMENT**

4-47. The operations element is primarily concerned with the execution of current operations. It plans, directs, coordinates, controls, and monitors the status of all organic, attached, and reinforcing FA units. FA brigade LNO(s) at the TOC will keep attached or reinforcing FA brigades apprised of the current situation, plans, ROE, and the force/div arty commander's guidance.

### **FIRE CONTROL ELEMENT**

4-48. The FCE performs tactical fire control. It assigns fire missions primarily to R, GSR, and GS firing units for immediate or future attack and determines type and amount of ammunition to be expended to achieve effects specified in the commander's attack criteria. In addition, the cell initiates requests for counterfire, EW, close air, and naval gunfire and passes them to the division FSE. It keeps attached/reinforcing FA brigades informed of targets and target indicators.

### **TARGETING ELEMENT**

4-49. The targeting element is supervised by the counterfire officer and is composed of target production and order of battle (OB) sections. These sections are responsible for collecting, processing, and disseminating targeting information for engaging enemy targets by fire. The div arty S2, with the assistance of the counterfire officer, will also develop and disseminate enemy artillery OB and coordinate plans for the emplacement of division radars.

### **Target Production Section**

4-50. Target production sections are augmented by personnel from the processing section of the TAB in heavy divisions. In non-mechanized divisions, the processing section of the reinforcing CTAD provides assistance. Efforts are focused on target information obtained from FA TA assets (primarily AN/TPQ-36/37 radars) or from the OB section. The section also plans, coordinates, and controls the employment of FA TA assets not attached to subordinate elements. Specific functions call for the section to:

- Recommend and coordinate sectors of search within the division area and adjust coverage by FA TA resources as the situation develops. Special consideration is required to maintain coverage of CFZs/CFFZs when

attached or when their DS artillery battalions displace their organic AN/TPQ-36 radars.

- Monitor the operation of organic and augmenting FA TA resources.
- Develop targets and suspect targets and refine target locations.
- Pass targets produced by the section to the FCE for attack.
- Maintain the target production map and the artillery target intelligence file in automated targeting systems.
- Maintain current target cards when operating in a non-automated environment.
- Request BDA on targets produced and passed to the FCE for attack.
- Act as NCS for the force artillery TA command and intelligence net.

## **OB Section**

4-51. Under the supervision of the div arty S2, this section focuses on enemy artillery OB and intelligence information received from other sources to generate artillery target intelligence. Specific functions are to:

- Develop enemy artillery OB and maintain the OB map, workbook, and duty log.
- Predict target locations and pass them to the target production section.
- Prepare and disseminate target intelligence reports and pass other intelligence to appropriate agencies.
- Monitor enemy FA tactics and techniques.
- Request BDA reports.

Other elements normally collocated with or near the div arty TOC and supervised by the div arty S3 include:

## **SURVEY PLANNING AND COORDINATION ELEMENT**

### **Heavy Division**

4-52. The SPCE consists of the reconnaissance and survey officer and chief surveyor who supervise two PADS teams and one conventional survey team. The primary mission of div arty survey is to establish battalion survey control points and an orienting line for assigned or attached firing and target-locating units. The primary mission is to provide support to AN/TPQ-37 Firefinder teams. This is done with existing trig lists or from division survey control points (SCPs) established by topographic surveyors. The secondary mission is to recover and verify existing survey control and to provide survey tie-in points to adjacent division areas. Division SPCEs are normally supported by an attached or OPCON topographic detachment. Time permitting, they assist FA battalion surveyors. Specifically, the SPCE:

- Ensures a common grid is available throughout the division area of operations to permit the massing of fires, the delivery of surprise observed and effective unobserved fires, and the transmission of target data from one unit to another.
- Coordinates survey operations with higher, lower, and adjacent units.

- Establishes survey priorities in accordance with the commander's intent.
- Requests external survey support and information from the engineer topographic company supporting the corps through the corps arty SPCE.
- Selects sites for declination stations.
- Maintains maps and overlays of completed, in-progress, and planned surveys.
- Disseminates survey information to organic teams including starting survey control and tie-in point data.
- Gathers, evaluates, and compiles survey control established by organic teams.
- Provides survey control to other users (intelligence and EW, OH-58D, mortars, etc.) according to survey priorities and recovers existing survey control points.

For further details on div arty survey operations, see FM 6-2.

### **Light, Airborne, And Airmobile Division SPCE**

4-53. As indicated in Chapter 2, div arty survey sections in airmobile, airborne, and light infantry divisions consist of two PADS teams. Since there are no survey officers in these div arty survey sections, the SPCEs consist of three enlisted personnel. However, responsibilities and basic functions of the PADS teams and the SPCE are the same as those in heavy div artys.

### **MET SECTION**

4-54. Div arty TOCs plan and coordinate met support for the division. Met sections are responsible for positioning sections to measure the atmosphere for the largest possible number of firing units, taking into account prevailing winds, terrain, time, security, and the tactical situation. For detailed information, see FM 6-15, *Tactics, Techniques, and Procedures for Field Artillery Meteorology*.

### **DIV ARTY SIGNAL OFFICER/COMMUNICATIONS PLATOON**

4-55. The platoon is designed to support the communications requirements of the div arty CP and execute the div arty C-E plan. The signal officer performs functions as noted in Section I.

### **LIAISON SECTION**

4-56. This section is responsible for establishing communications and coordinating FA matters with adjacent and supported units. When directed, LNOs exchange data and coordinate fires across division boundaries. Similar to corps-level operations, most of the div arty's liaison requirements are dealt with by FSEs. In selected cases, div artys may be required to establish additional liaison links e.g., when the division is in reserve and the div arty is given a reinforcing mission or is placed in corps GS. Also, when a FA brigade reinforces the div arty, reciprocal liaison should be established.

## **AERIAL FIRE SUPPORT OBSERVERS**

4-57. The controlling artillery CP will determine the employment of aerial fire support observers (AFSOs) in combat. AFSOs should be briefed concerning the following:

- Areas and type of TAI, along with FSCMs and boundaries.
- Required time of surveillance.
- Required radio frequencies, COMSEC equipment, call signs, maps, and photographs.
- Planned targets and reference points.
- Target-marking SOP if AFSOs are assigned to OH-58D helicopters.
- Laser codes for Copperhead, Hellfire, and laser-guided munitions.
- Available FS means to include points of contact and location.
- Procedures for requesting SEAD.
- Locations of enemy AD in area.

## **TARGET ACQUISITION BATTERY**

4-58. The TAB, as part of the armored and mechanized infantry division's MLRS battalion, provides a critical TA capability. It locates targets and provides combat information and impact data to register and adjust FA cannons. The TAB assistant counterfire officer and target production section are normally part of the div arty's TOC targeting cell to assist the div arty counterfire officer. C2 of the radars can be centralized at div arty, decentralized by attaching radar sections to subordinate FA battalions, or a combination of both. If the counterfire role is assigned to a reinforcing FA brigade, div arty counterfire assets will be shifted to augment FA brigade counterfire operations.

## **SECTION IV - FA BRIGADE CP OPERATIONS**

### **TACTICAL OPERATIONS CENTERS**

4-59. FA brigade TOCs control and coordinate the operations of subordinate FA battalions. Under the supervision of the brigade S3, they integrate fire planning, operations, target production, FA OB, and information from all intelligence sources. Since brigade TOEs do not authorize an assistant S3 plans, one of the operations or intelligence officers may be required to perform planning functions. When required, FA brigades in a GS role will assume corps arty responsibilities as alternate CP as indicated in the FA support plan. Responsibilities for the three TOC sections are as follows:

#### **OPERATIONS ELEMENT**

4-60. The operations element is concerned mainly with current operations, coordination, and the development of plans to support future operations.

#### **FIRE CONTROL ELEMENT**

4-61. This element controls the delivery of tactical FA fires in support of current operations. In the process, the FCE:

- Uses the commander's attack guidance to analyze targets for attack.
- Disseminates FA targets to appropriate firing elements.
- Requests the attack of targets by nonorganic systems, as required.

## **TARGETING ELEMENT**

4-62. Similar to div arty TOCs, the targeting element is organized into a target production section and an OB section. Manning is minimal. If the brigade CP assumes the counterfire function or is tasked with any substantial responsibility for targeting, it must be augmented. Usually a heavy div arty will provide the target processing section and a number of radars from the TAB, or the corps may attach a CTAD. If the brigade is the force FA HQ in DS of a maneuver unit, this augmentation is normally provided from corps arty or div arty/corps-controlled TA assets. In that case, the FA brigade as outlined for the divisional targeting element and target production section will assume responsibilities for counterfire operations.

4-63. As noted under corps arty and div arty discussions, selected HQ elements fall under the direct supervision and control of the CofS/XO or S3 in the TOC. In case of FA brigades, these include:

## **LIAISON SECTION**

4-64. Liaison teams represent their brigade commander when placed with supported or reinforced units. They are tasked to ensure a timely exchange of information or to form the nucleus of an FSE, when necessary.

4-65. FA brigades have the most varied and least predictable liaison requirements. Because of limited resources in the face of potentially extensive on-order missions, brigade commanders must regularly prioritize liaison requirements and often rely on electronic liaison. The brigade usually maintains physical liaison with corps arty and with supported maneuver and FA units. Full-time liaison with units having on-order commitments will depend on the criticality of that mission and the likelihood of execution. See Appendix F for additional details.

## **SURVEY PLANNING AND COORDINATION ELEMENT**

4-66. FA brigade SPCEs coordinate survey operations for subordinate elements in support of corps arty and div arty survey plans. Since FA brigade SPCEs have no organic survey teams, coordination for brigade survey requirements gains increased significance. When brigades are assigned a DS mission, the SPCE mission is similar to that of the div arty SPCE and includes coordination of survey requirements with the corps arty SPCE. When the brigade is assigned an R, GSR, or GS mission, it coordinates survey requirements with the supported artillery unit's SPCE.

## **MET SECTION**

4-67. Operations of FA brigade met sections are usually coordinated with the S3 of the supported div arty or the div arty in whose area the brigade operates when in corps GS.

## HEADQUARTERS SUPPORT SECTION

4-68. The HQ support section corresponds to the ALOCs of the other HHBs. It accomplishes the brigade's administrative and logistic staff functions.

## SECTION V - FA RELATIONSHIP AND INTERFACES WITH EXTERNAL FS AGENCIES

### GENERAL

4-69. FA is but one element of a larger FS system integrated in corps and division main, tactical, and rear CPs. An understanding of the various FS elements and associated functions and responsibilities may, therefore, assist in placing the FA's role and battle contributions into better perspective. The following paragraphs briefly address functions and responsibilities of corps FSCs, division FSEs, and DOCCs. Further details can be found in FMs 100-15, 6-20-30, and 71-100.

## FORCE FIRE SUPPORT CELLS/ELEMENTS

### CORPS MAIN CP FSC

4-70. Corps main CPs control all aspects of corps and division battles, processing input from higher, lower, and adjacent units. The corps FSC, as a major entity of the corps main CP, manages FS resources under the FSCCOORD's supervision. It is staffed with representatives from corps arty and corps aviation, AD, engineer, chemical support, and EW elements. In addition, representatives from the following sections are normally collocated with the FSC: signal officer, air support operations center/air liaison officer (ASOC/ALO), and naval LNO.

4-71. FAIOs representing the FSC within the ACE pass target nominations to the appropriate FSE for engagement. They are a vital link in the attack of HPTs and may pass identified HPTs and other targets directly to corps/division FSC/FSEs or with approval directly to the firing unit.

### DIVISION MAIN CP FSE

4-72. The division FSE is a subordinate element of the G3 cell within the division main CP. It is the focal point for planning, coordinating, and integrating all FS for division operations under the supervision of the DFSCCOORD. The FSE is manned by div arty personnel, the assistant division engineer, the electronic warfare officer (EWO), and representatives from the tactical air control party (TACP), AD element, and division aviation. The div arty section within the FSE works for and responds directly to the division G3 in support of the division battle. It is responsible for all FSE functions to include coordinating the activities of the other FSE sections. The FSE is responsible for the allocation of FA resources and establishing FA priorities in support of decisive, shaping, and sustaining operations.

4-73. FSEs at tactical and rear CPs are extensions of the main CP FSE, assisting the main FSE in controlling assets engaged in close and rear operations. The tactical CP FSE coordinates FS for close operations. It also coordinates and implements the FS plan developed by the main CP FSE,

responds to additional requests for FS, and identifies FS requirements for immediate and near-immediate tactical situations. It maintains the location and status of all FS assets supporting close operations with priorities based on decisions by the G3, assistant division commander-maneuver (ADC-M), or command group. Division rear CP FSEs are composed of div arty personnel designated by the div arty commander.

## **DEEP OPERATIONS COORDINATION CELLS**

### **CORPS**

4-74. A single organization at corps and division level is doctrinally responsible for planning and synchronizing deep operations to ensure unity of effort and full integration of all capabilities. This organization is the DOCC. DOCCs at corps and division are responsible for planning operational and tactical-level deep fires to include airspace coordination, target acquisition and deconfliction, and FS coordinating measures within corps and division AOs. FS responsibility forward of division AOs belongs to corps DOCCs. As the focal point for deep operations, they are one of the primary interface points for corps arty and div arty TOCs.

4-75. DOCC functional area members may either collocate in a cell or use scheduled meetings, briefings, or local area networks (LANs) to perform DOCC responsibilities in addition to their primary functions. Key participants are selected corps and division staff members to include plans, operations, intelligence, FS, ADA, army airspace command and control (A2C2), special operations, Army aviation, and CSS elements. Additional support will be provided by the ALO, other joint service members, and allies. The DOCC also maintains a close interface with the BCD, AOC, and joint targeting coordination board (JTCCB). For further information, see FM 6-20-30.

### **Functions**

4-76. Corps deep operations are directed against enemy forces and functions not engaged in the close battle. Successful deep corps operations require the careful and continuous synchronization of activities between the corps G2, G3, EWO, aviation brigade, FSE, AD element, A2C2, AOC, and other agencies.

4-77. Army doctrine notes that ad hoc cells are inefficient in planning and executing the corps deep battle. The solution is to form a DOCC normally in the corps main CP with the mission as C2 facility to support deep operations.

Within the main CP, DOCC members position themselves to track the status of close and rear operations and continually assess their correlation with deep operations.

4-78. The DOCC confirms and validates targeting data, determines if the current decide criteria for the target remains valid, and allocates attack resources to engage the target. The DOCC must also coordinate the allocation of intelligence and EW assets to perform BDA for deep operations early in the planning process.

## **DIVISION DOCC**

4-79. At division, as at corps level, deep operations are normally planned and controlled where the most information is available: the command's main CP. The DOCC helps the commander focus activities of all units, agencies, and cells involved in supporting deep operations. It operates under the supervision of the division CofS. The division commander determines the configuration of the DOCC based on mission requirements, available personnel, and equipment capabilities. Linking selected staff members from the appropriate main CP cells either physically or electronically may form the DOCC. The G3 assists in coordinating the deep operations. However, the DOCC is not an ad hoc organization, but a trained entity capable of continuously synchronizing all BOS. It normally consists of representatives from div arty, G2 and G3 planners, aviation personnel with additional support from EWO, ADA officer, ALO, G3 air, PSYOP, SJA, and civil affairs representatives as required.

4-80. The DOCC plans, synchronizes, and identifies HPTs to be tracked and attacked. It monitors and supports the execution of deep operations. In addition, it monitors close and rear operations and continually assesses their relationship to deep operations. The overall responsibility for the synchronization of all operations -- deep, close, and rear -- remains with the main CP.